

46/663, 671

Examiner's Notes

Canceled non-elected claims 1-3 on Jan 11, 2006

s(Sampling) (8a) (laser (4a) beam# or laser (4c) ray#)
s(Oscillator)

s(laser (8b) irradiat?)

s(control? or alter? or vary?) (8b) (~~speed~~)

s(speed or rate#) (8c) (laser (4a) beam# or beam#) or beam (6a) spot

s(Fluctuat? (6a) energy?)

12 P2 Rej:

Claim 4 "... signal processing, b6" line 8

Claim 7 "... crystallinity ...", line 14

III *4 Mtd

VIII

*8 Mtd

II

*5 Mtd

I *9 Mtd

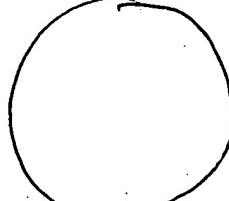
IV

*6 Mtd

II *10 Mtd

VI

*7 Mtd



Search History

STN

(HCAPLUS, USPATALL, INSPEC, JATPO, INPADOC)

3/2/06

=> d 13 1-2 abs,bib

L3 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

AB The present invention relates to a probe for an electro-optic sampling oscillator. The probe for an electro-optic sampling oscillator provides a laser diode that generates a laser beam based on the control signal of the electro-optical sampling oscilloscope; a collimator lens that makes the laser beam into a parallel beam; an electro-optic element that has a reflecting film at the end; an isolator provided between the collimator lens and the electro-optic element that passes the laser beam that is generated by the laser diode and separates the reflected beam of the laser beam that was reflected by the reflecting film; photodiodes that convert the reflected beam separated by the isolator into an electrical signal; and a condenser lens provided between the isolator and the electro-optic element that condenses the parallel beam to one point on the reflecting film, makes the reflected beam reflected by the reflecting film into a parallel beam again, and makes the optical axes of the light incident on the reflecting film and the light reflected by the reflecting film coincide.

AN 2000:906073 HCAPLUS

TI Electro-optic probe

IN Ito, Akishige; Ohta, Katsushi; Yagi, Toshiyuki; Shinagawa, Mitsuru; Nagatsuma, Tadao; Yamada, Junzo

PA Ando Electric Co., Ltd., Japan; Nippon Telegraph and Telephone Corporation

SO U.S., 9 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6166845	A	20001226	US 1999-317917	19990525
PRAI JP 1998-148033	A	19980528		

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

AB Described in detail is a laser-induced fluorescence system which was successfully interfaced with 2 aircraft sampling platforms. This system consists of: (1) a Nd-Yag (Y-Al garnet) laser driven oscillator-amplifier dye laser; (2) a sampling manifold with associated fluorescence detection optics; (3) an OH calibration chamber; (4) a laser beam steering assembly; and (5) sampling electronics and data processing hardware. This system was flown some 50,000 air miles making tropospheric OH radical measurements over the latitude range of 70° N to 57° S. The OH concns. measured during these flights were 30 parts-per-quadrillion (3.7 + 105 mols./cm³) at altitudes of 6 km to 0.8 parts-per-trillion (2.0 + 107 mols./cm³) at 0.5 km. Computations indicate that the existing aircraft system with modest modifications should be capable of detecting natural tropospheric levels of NO, SO₂, CH₂O, NO₂, HNO₂, NO₃, H₂O₂, and CS₂ by using both conventional laser-induced fluorescence methodol. and multiphoton techniques.

AN 1980:97195 HCAPLUS

DN 92:97195

TI Airborne laser-induced fluorescence system for measuring hydroxyl radical and other trace gases in the parts-per-quadrillion to parts-per-trillion range

AU Davis, D. D.; Heaps, W. S.; Philen, D.; Rodgers, M.; McGee, T.; Nelson, A.; Moriarty, A. J.

CS Sch. Geophys. Sci., Georgia Inst. Technol., Atlanta, GA, 30332, USA

SO Review of Scientific Instruments (1979), 50(12), 1505-16

CODEN: RSINAK; ISSN: 0034-6748

DT Journal

LA English

FILE 'HOME' ENTERED AT 10:46:32 ON 02 MAR 2006

=> fil hcaplus, inspec, japiro, uspatall, inpadoc
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CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'INPADOC' ENTERED AT 10:48:31 ON 02 MAR 2006
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=> s (laser(8a)irradiat?)
L1 118415 (LASER(8A) IRRADIAT?)

=> s (control? or alter? or vary?)
4 FILES SEARCHED...
L2 12046865 (CONTROL? OR ALTER? OR VARY?)

=> s (speed# or rate#)(8a)(laser(2w)beam# or beam# or beam(2w)spot3#)
L3 61434 (SPEED# OR RATE#)(8A) (LASER(2W) BEAM# OR BEAM# OR BEAM(2W) SPOT3
#)

=> s (flutuat? or alter? or vary? or manipulat?)(8a)(energ?)
L4 104000 (FLUTUAT? OR ALTER? OR VARY? OR MANIPULAT?)(8A) (ENERG?)

=> d his

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FILE 'HCAPLUS, INSPEC, JAPIO, USPATFULL, USPAT2, INPADOC' ENTERED AT
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L1 118415 S (LASER(8A)IRRADIAT?)
L2 12046865 S (CONTROL? OR ALTER? OR VARY?)
L3 61434 S (SPEED# OR RATE#)(8A) (LASER(2W)BEAM# OR BEAM# OR BEAM(2W)SPOT
#)
L4 104000 S (FLUTUAT? OR ALTER? OR VARY? OR MANIPULAT?)(8A) (ENERG?)

=> s l2 and l3
L5 37674 L2 AND L3

=> s l2 and l4
L6 103078 L2 AND L4

=> d his

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FILE 'HCAPLUS, INSPEC, JAPIO, USPATFULL, USPAT2, INPADOC' ENTERED AT
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L1 118415 S (LASER(8A)IRRADIAT?)
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L4 104000 S (FLUTUAT? OR ALTER? OR VARY? OR MANIPULAT?)(8A) (ENERG?)

L5 37674 S L2 AND L3

L6 103078 S L2 AND L4

=> s l1 and l5 and l6

L7 326 L1 AND L5 AND L6

=> d his

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FILE 'HCAPLUS, INSPEC, JAPIO, USPATFULL, USPAT2, INPADOC' ENTERED AT
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L1 118415 S (LASER(8A)IRRADIAT?)
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=> s l2 and l3

L5 37674 L2 AND L3

=> s l2 and l4

L6 103078 L2 AND L4

=> d his

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L4 104000 S (FLUTUAT? OR ALTER? OR VARY? OR MANIPULAT?) (8A) (ENERG?)
L5 37674 S L2 AND L3
L6 103078 S L2 AND L4

=> s l1 and l5 and l6

L7 326 L1 AND L5 AND L6

=>